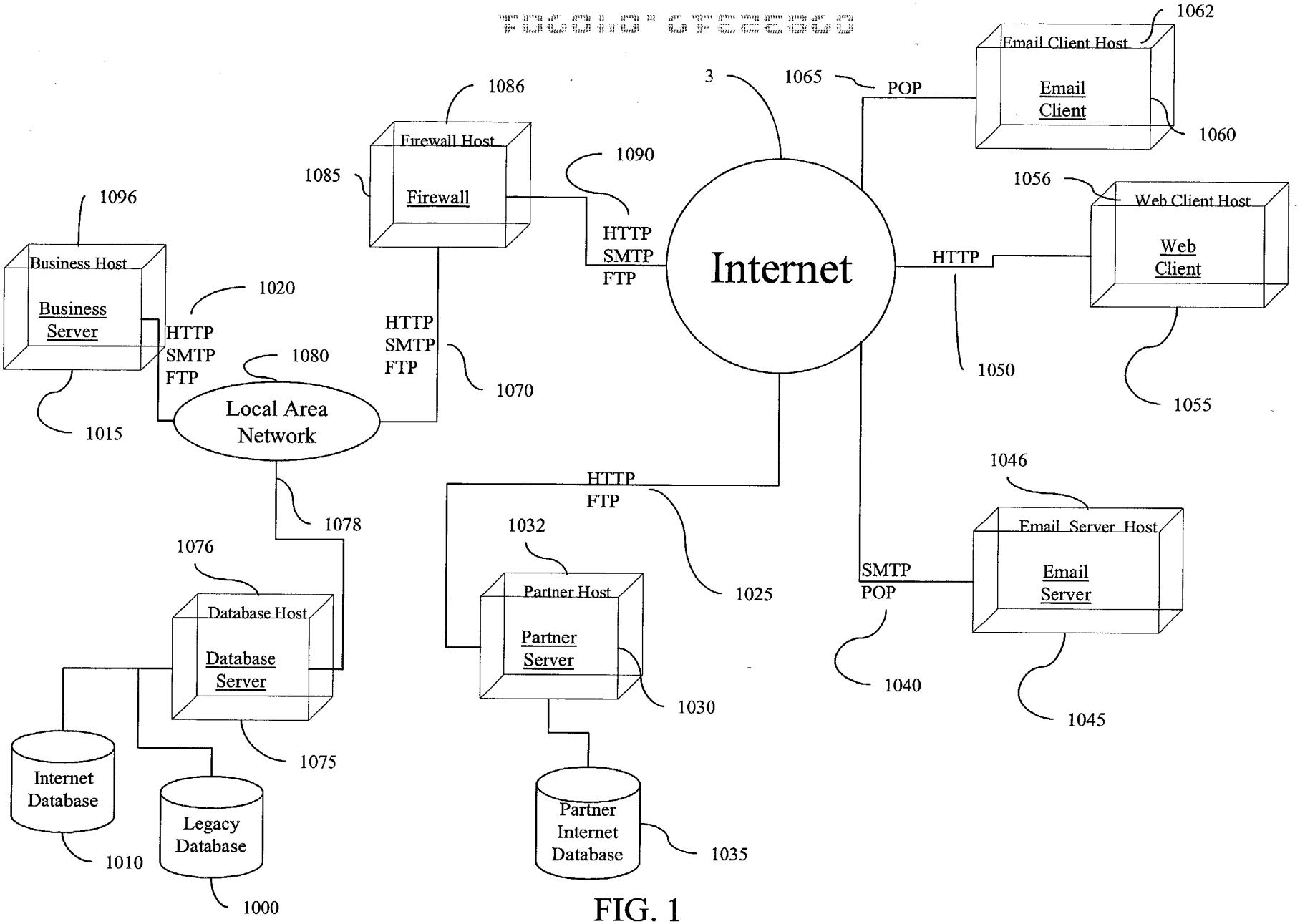
Internet
3
Email Client Host
Email Client
1062
1060
1065
POP
Firewall Host
Firewall
1086
1085
1090
HTTP
SMTP
FTP
Web Client Host
Web Client
1056
1055
HTTP
1050
Business Host
Business Server
1096
1020
HTTP
SMTP
FTP
1015
Local Area Network
1080
HTTP
SMTP
FTP
1070
1078
HTTP
FTP
1025
Email Server Host
Email Server
1046
SMTP
POP
1040
1045
Partner Host
Partner Server
1032
1030
Database Host
Database Server
1076
1075
Internet Database
1010
Legacy Database
1000
Partner Internet Database
1035

FIG. 1

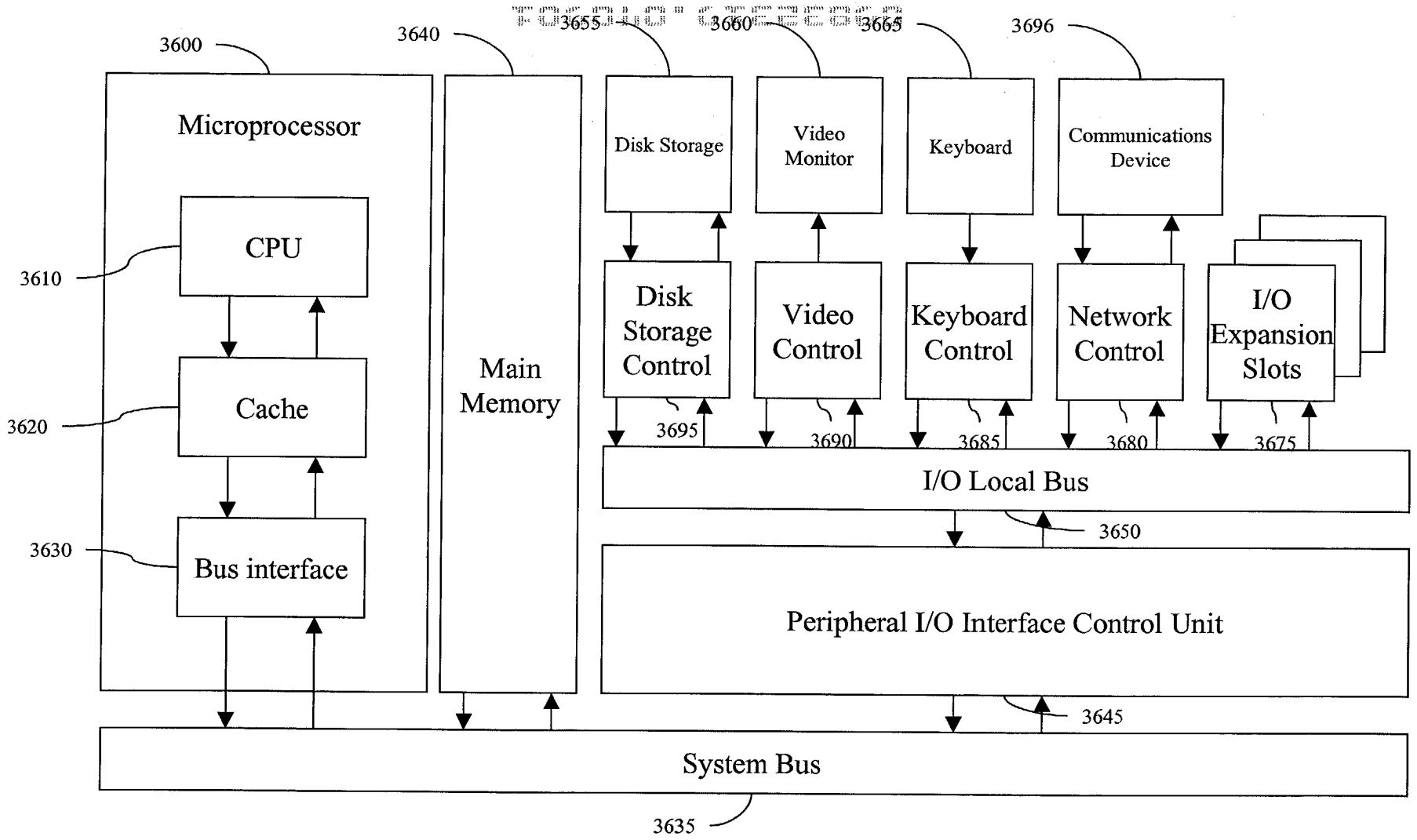
3600
Microprocessor
CPU
3610
Cache
3620
Bus interface
3630
3640
Main Memory
3655
Disk Storage
3660
Video Monitor
3665
Keyboard
3696
Communications Device
Disk Storage Control
Video Control
Keyboard Control
Network Control
I/O Expansion Slots
3695
3690
3685
3680
3675
I/O Local Bus
3650
Peripheral I/O Interface Control Unit
3645
System Bus
3635

FIG. 2

PUBLIC SPECIFIED

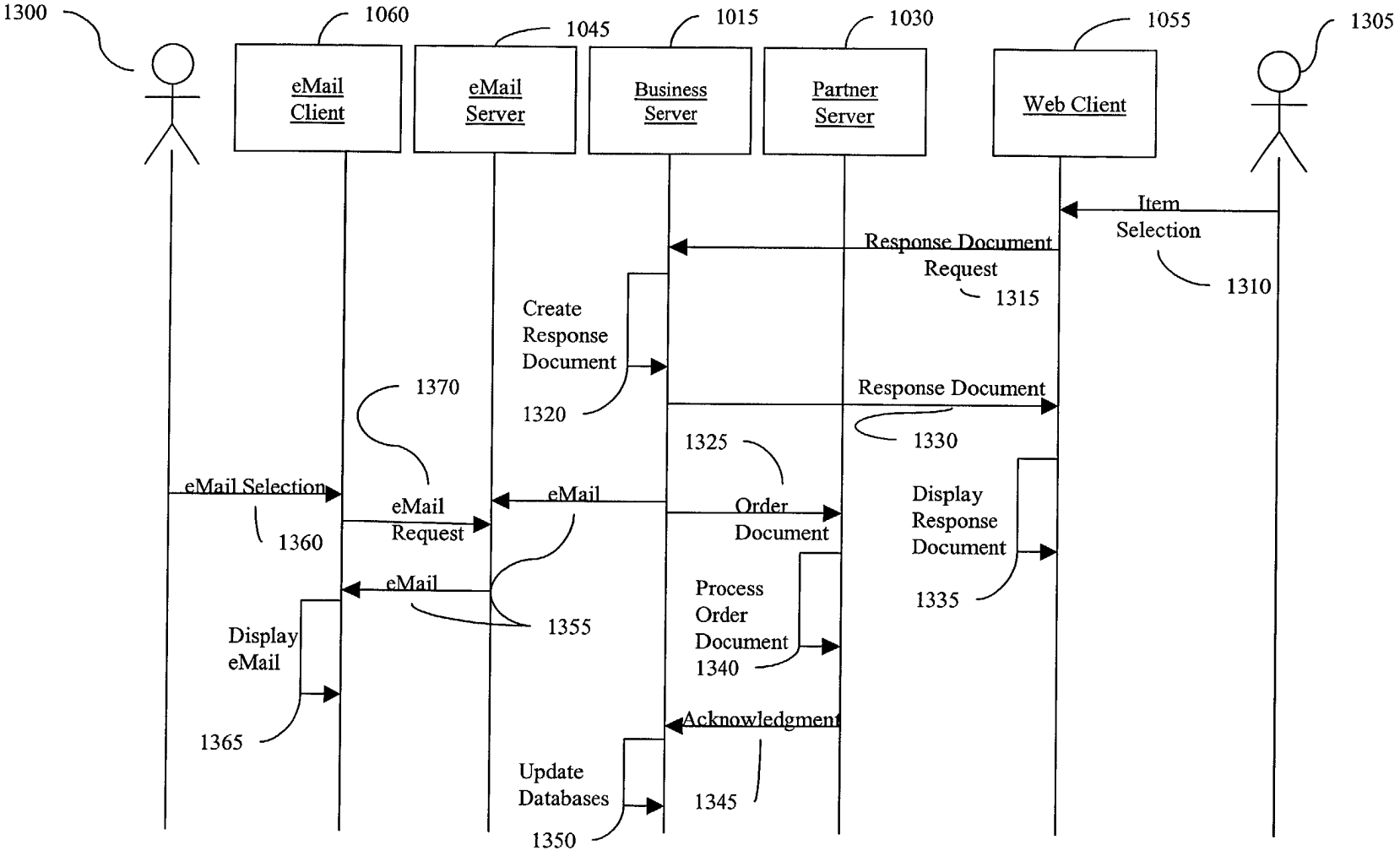

FIG. 3

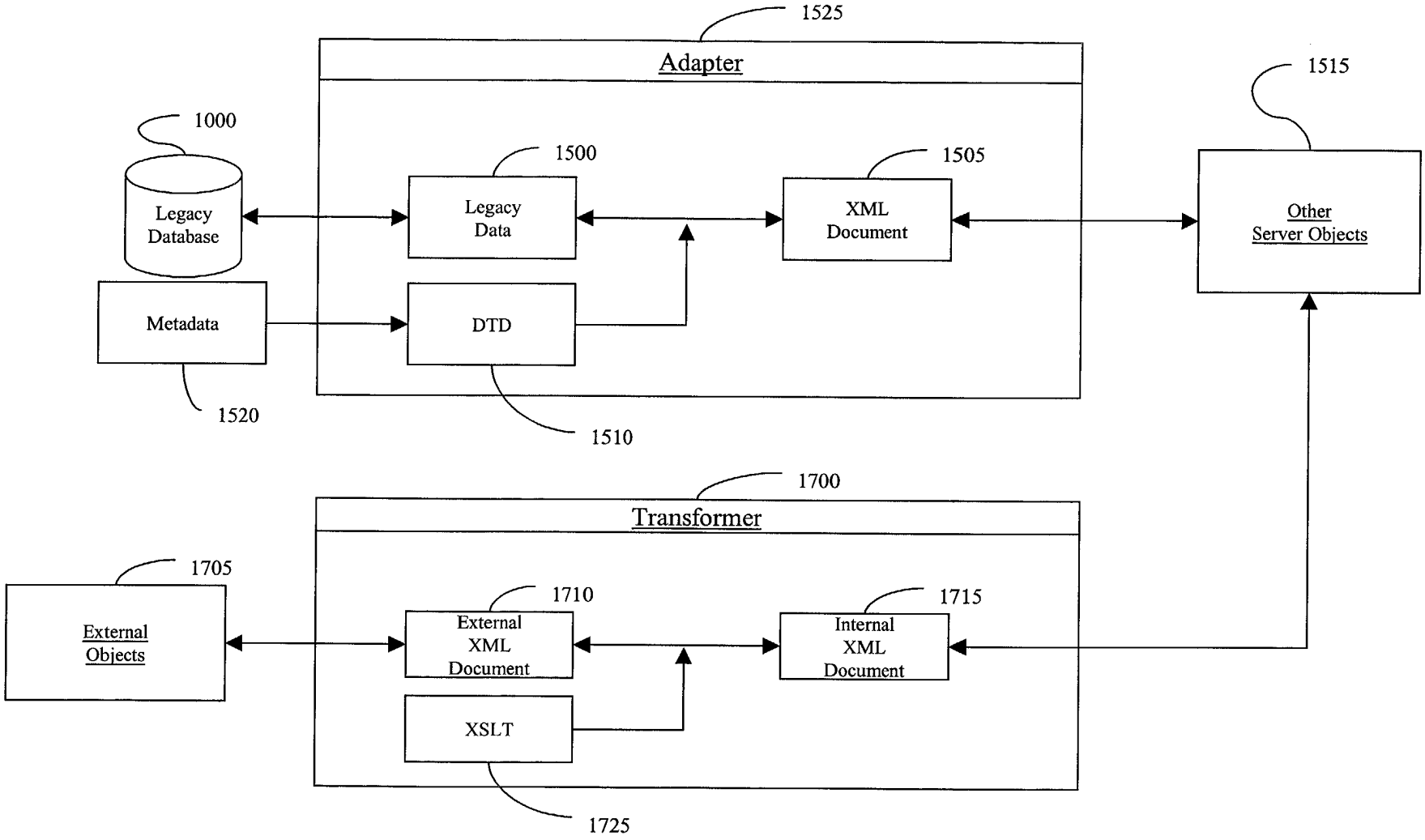
1525
Adapter
1515
1000
1500
1505
Legacy Database
Legacy Data
XML Document
Other Server Objects
Metadata
DTD
1520
1510
1700
Transformer
1705
1710
1715
External Objects
External XML Document
Internal XML Document
XSLT
1725

FIG. 4

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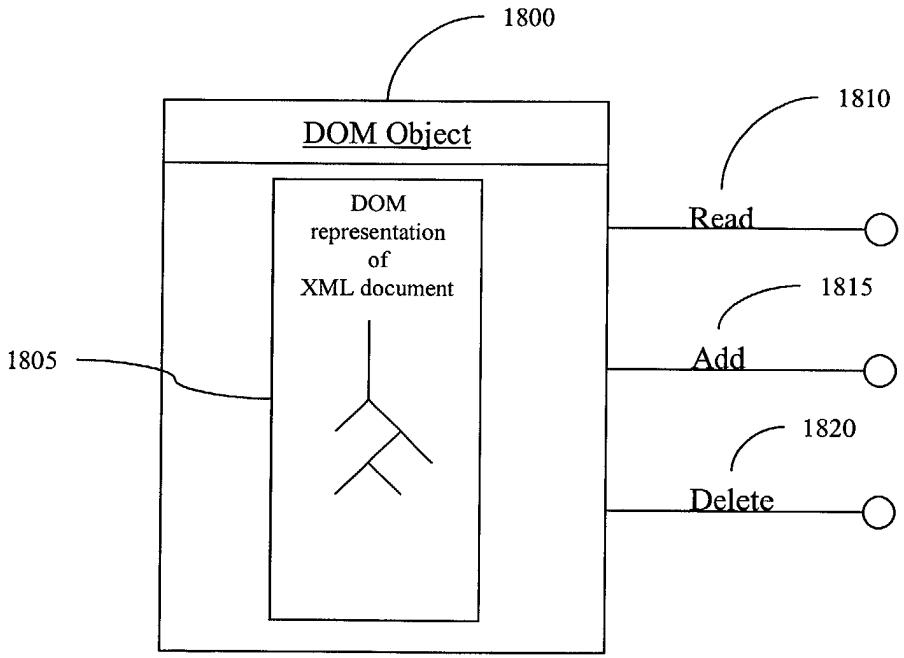

FIG. 5

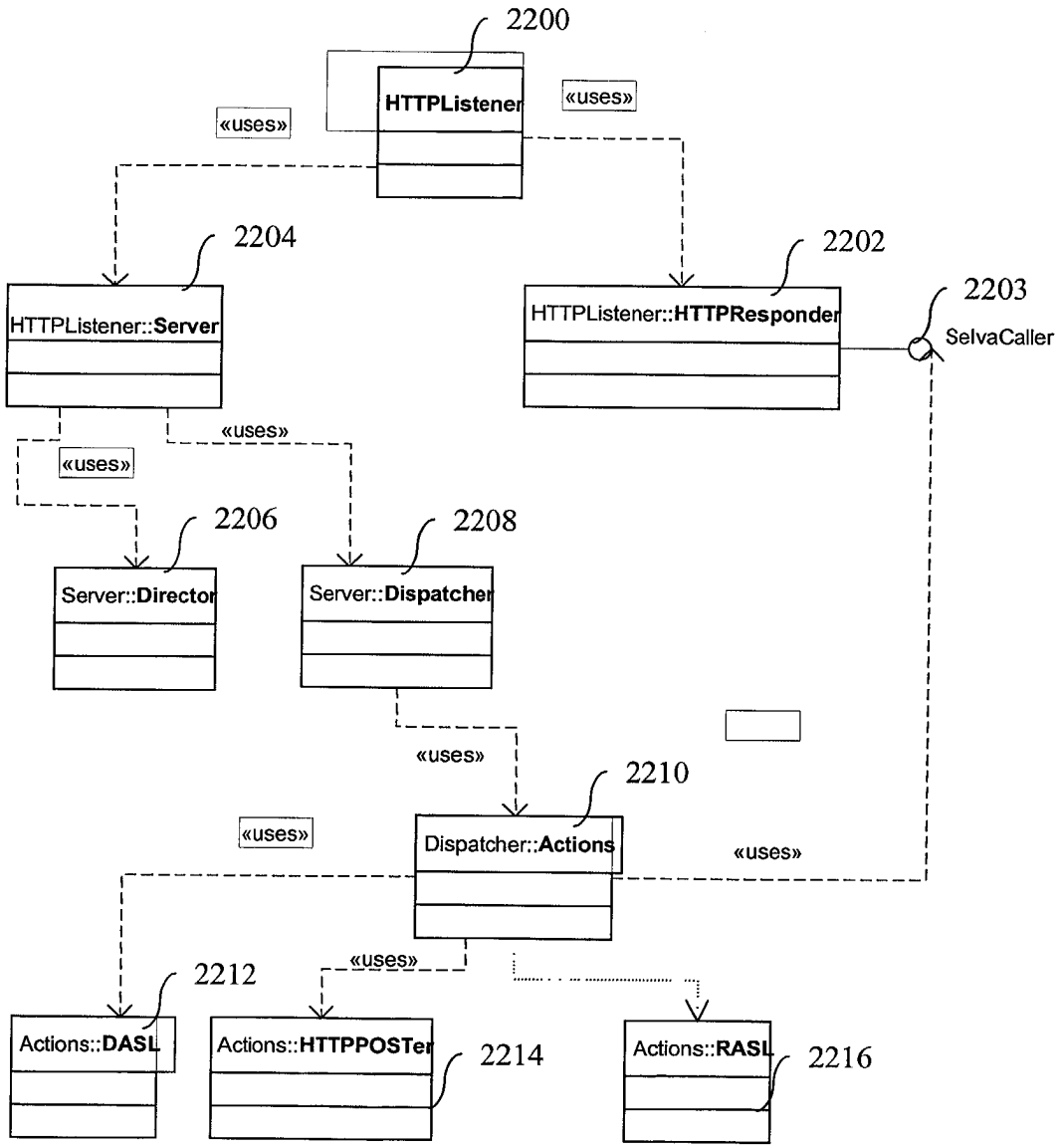
2200
HTTPListener
«uses»
«uses»
2204
2202
2203
HTTPListener::Server
HTTPListener::HTTPResponder
SelvaCaller
«uses»
«uses»
2206
2208
Server::Director
Server::Dispatcher
«uses»
2210
«uses»
Dispatcher::Actions
«uses»
«uses»
2212
Actions::DASL
Actions::HTTPPOSTer
2214
Actions::RASL
2216

FIG. 6

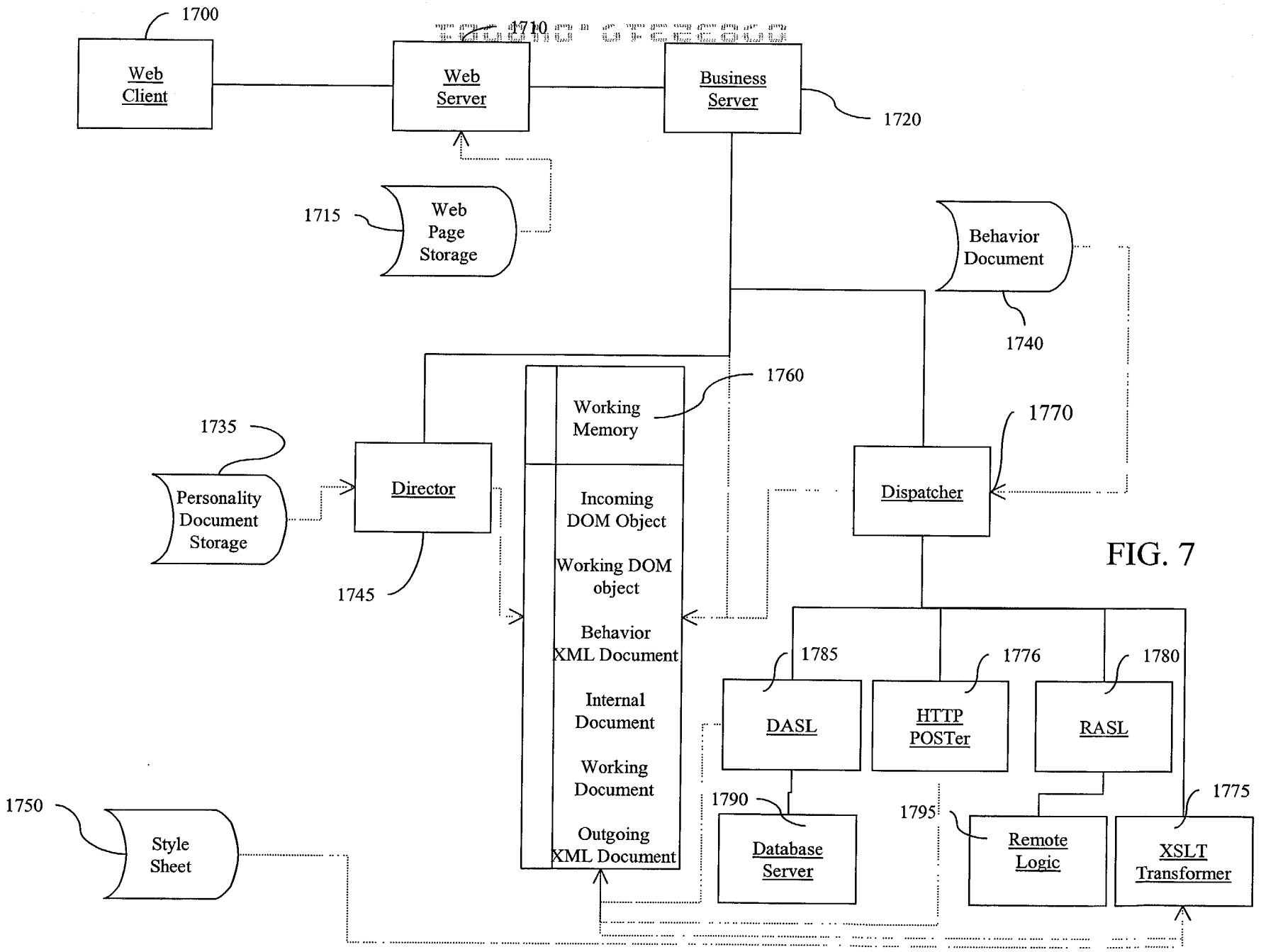
1700
Web Client
1710
Web Server
Business Server
1720
1715
Web Page Storage
Behavior Document
1740
1760
Working Memory
1735
Personality Document Storage
Director
1745
Incoming DOM Object
Working DOM object
Behavior XML Document
Internal Document
Working Document
Outgoing XML Document
1770
Dispatcher
1785
1776
1780
DASL
HTTP POSTer
RASL
1790
Database Server
1795
Remote Logic
1775
XSLT Transformer
1750
Style Sheet

FIG. 7

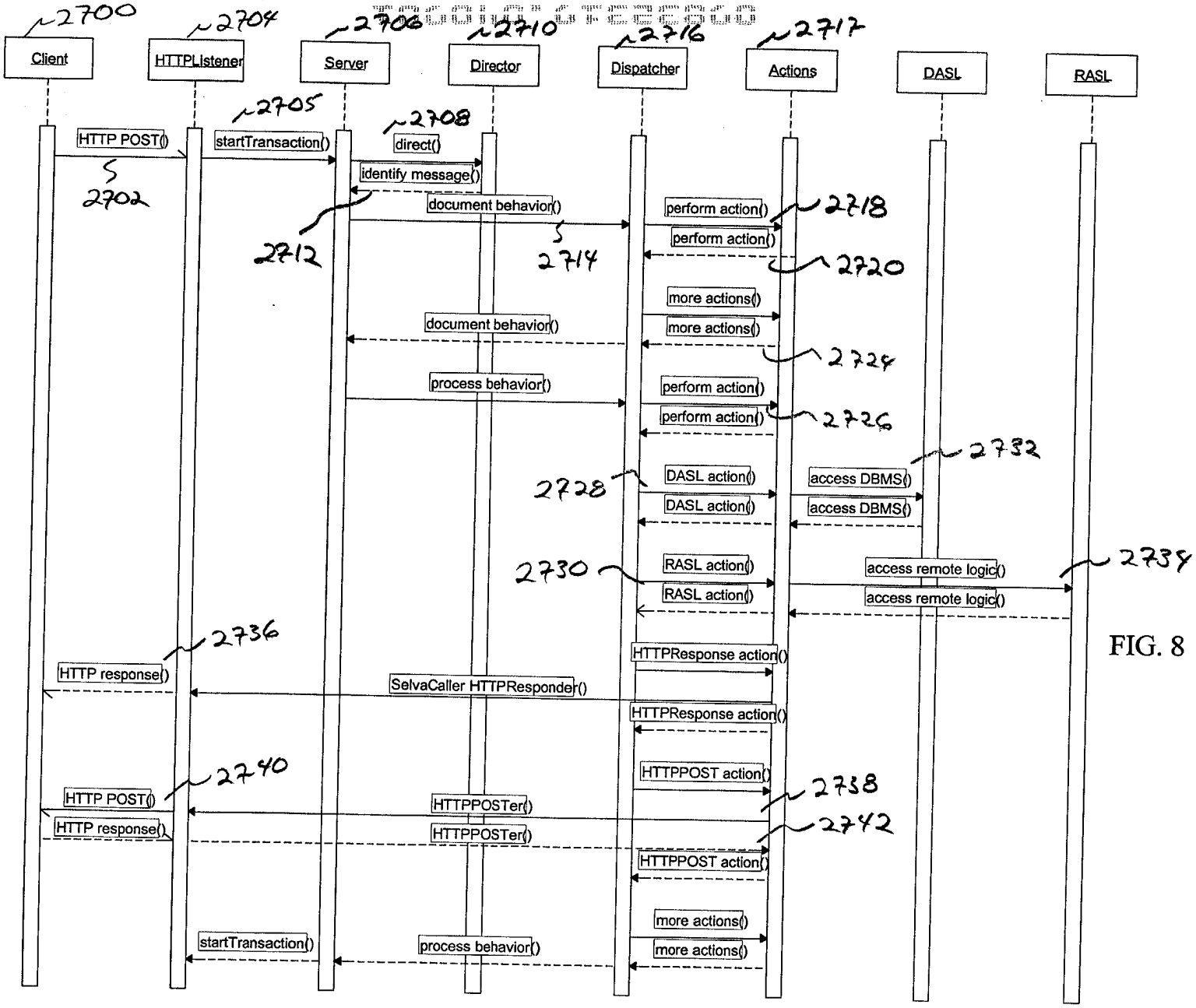
2700
2704
2706
2710
2716
2717
Client
HTTPListener
Server
Director
Dispatcher
Actions
DASL
RASL
2705
2708
HTTP POST()
startTransaction()
direct()
identify message()
document behavior()
2702
2712
2714
perform action()
2718
perform action()
2720
more actions()
more actions()
document behavior()
2724
process behavior()
perform action()
perform action()
2726
2732
2728
DASL action()
access DBMS()
DASL action()
access DBMS()
2730
RASL action()
access remote logic()
2734
RASL action()
access remote logic()
2736
HTTP response()
HTTPResponse action()
SelvaCaller HTTPResponder()
HTTPResponse action()
2740
HTTPPOST action()
HTTP POST()
HTTPPOSTer()
2738
HTTP response()
HTTPPOSTer()
2742
HTTPPOST action()
more actions()
startTransaction()
process behavior()
more actions()

FIG. 8

```
<selva:Personality xmlns:selva="http://www.server.com/Selva/Personality">
  <businessDocuments>
    <businessDocument name="RosettaNetPORequest"
      type="XML|Java|EJB|COM|Resume"
      objectId="ProgID|JavaClass|Bean"
      businessProcess="businessProcessName"
      documentBehavior="RosettanetPORequest.xml"
      connectionXPath="XPathToConnection"
      GUIDSource="documentName"
      GUIDXPath="XPathToGUID"
      newInputDocumentName="ResponseDocument2">
      <criteria>
        <testBatch>
          <test testSourceName="inputDocument" XPath="/Pip3A4PurchaseOrderRequest"/>
        </testBatch>
      </criteria>
    </businessDocument>
  </businessDocuments>
  <businessProcesses>
    <businessProcess name="PurchaseOrder" processBehavior="behaviorfile.xml" />
  </businessProcesses>
  <businessMethods>
    <businessMethod name="myFunction"
      WSDLFile="WSDLFiles\OurWSDLFile.xml"
      type="Java|EJB|COM|XML"
      pathInfo="GETorPOSTPathInfo"
      localObjectName=" ProgID|JavaClass|Bean" />
    </businessMethods>
</selva:Personality>
```

1900, 1902, 1904, 1906, 1908, 1910, 1912, 1914, 1916, 1918

FIG. 9

PATENT PENDING

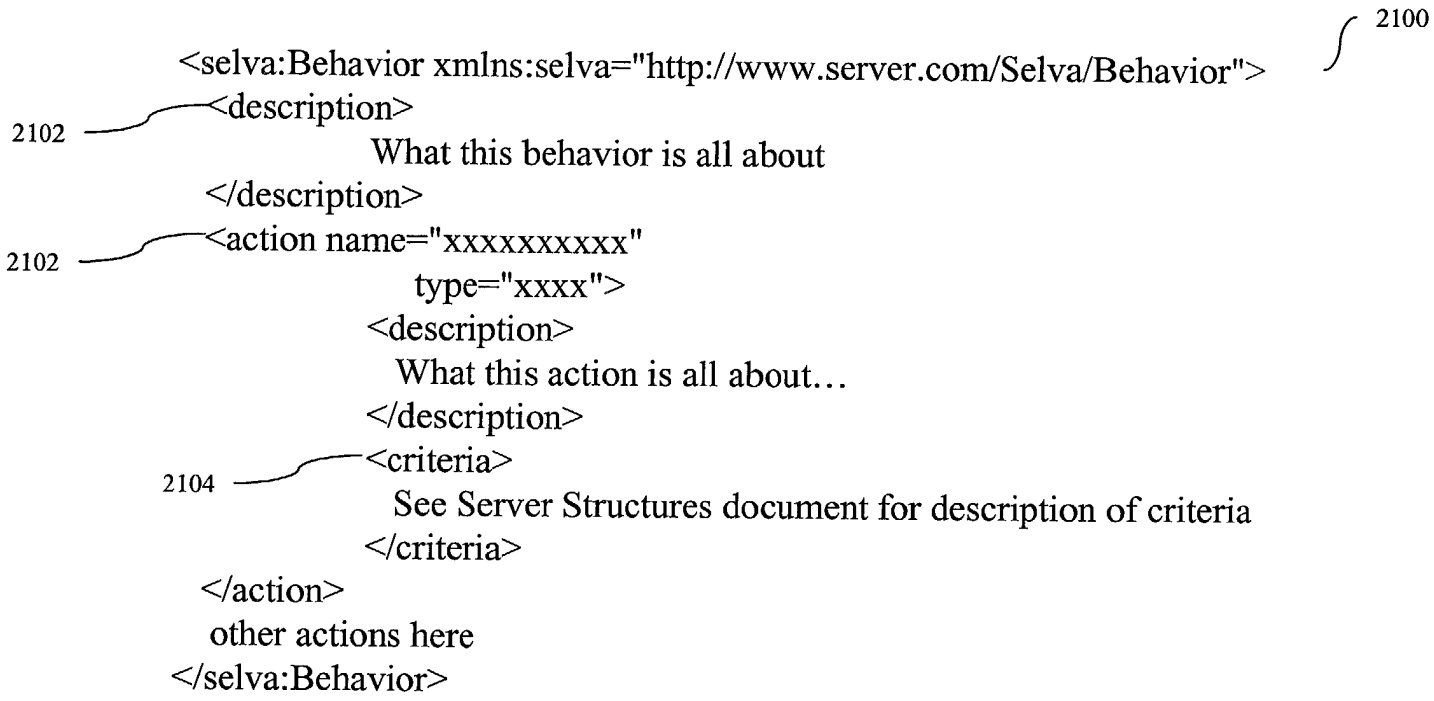

FIG. 10

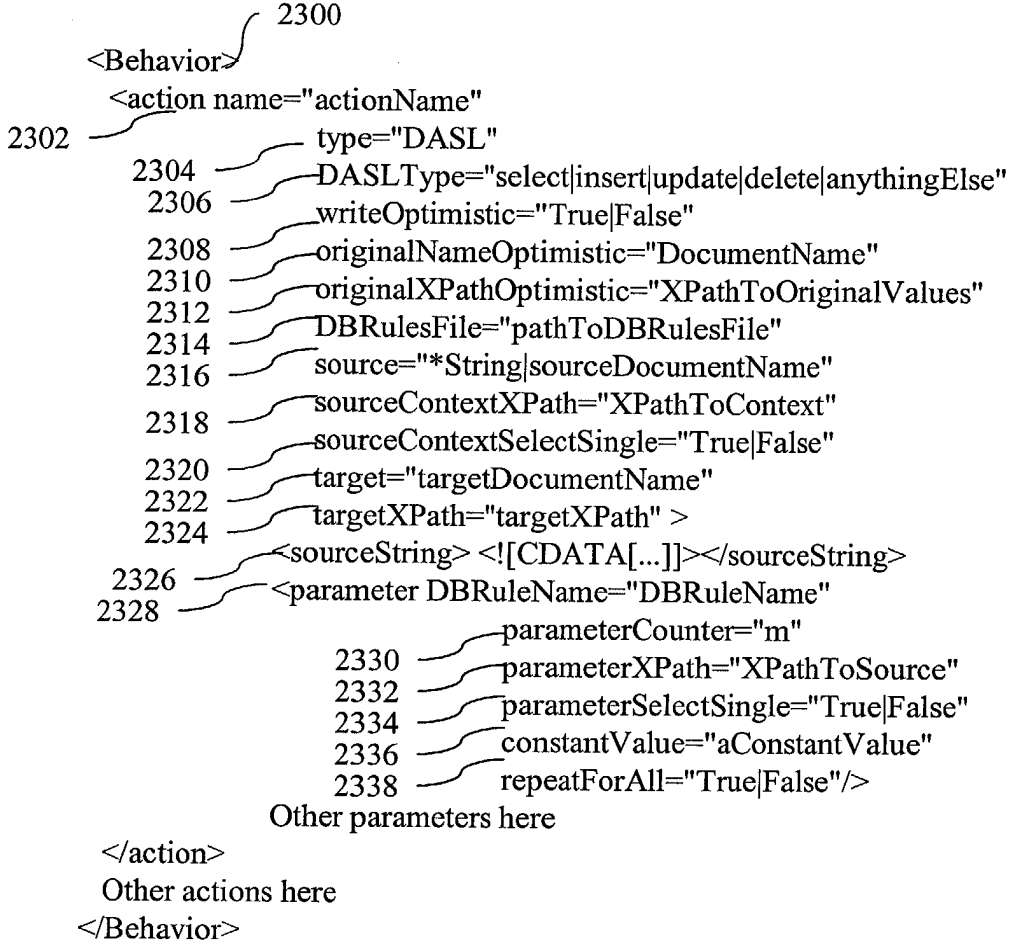
2300
<Behavior>
<action name="actionName"
2302
type="DASL"
2304
DASLType="select|insert|update|delete|anythingElse"
2306
writeOptimistic="True|False"
2308
originalNameOptimistic="DocumentName"
2310
originalXPathOptimistic="XPathToOriginalValues"
2312
DBRulesFile="pathToDBRulesFile"
2314
source="*String|sourceDocumentName"
2316
sourceContextXPath="XPathToContext"
2318
sourceContextSelectSingle="True|False"
2320
target="targetDocumentName"
2322
targetXPath="targetXPath" >
2324
<sourceString> <![CDATA[...]]></sourceString>
2326
<parameter DBRuleName="DBRuleName"
2328
parameterCounter="m"
2330
parameterXPath="XPathToSource"
2332
parameterSelectSingle="True|False"
2334
constantValue="aConstantValue"
2336
repeatForAll="True|False"/>
2338
Other parameters here
</action>
Other actions here
</Behavior>

FIG. 11

```
<selva:DBRules xmlns:selva="http://www.server.com/Selva/DBRules">
  <DBRule    name="DBRuleName"
2400 ~                    selectSingle="True|False"
                          type="select|insert|update|delete|anythingElse"
                          connectionXPath="XPathToConnectInfo"
                          contextXPath="RelativeXPathContext"
                          contextSelectSingle="True|False"
                          targetXPath="XPathToTarget" >
        <command>
2402 ~      <text>
2404 ~        SELECT InStock "InStock", ReOrderLevel "ReOrderLevel",
              UnitPrice "UnitPrice"
              FROM Inventory, Items
              WHERE ((ItemId = Items.PKId) AND (ItemId = ?) AND StoreId=1)
            </text>
2406 ~      <parameter type="Integer"
                                  scale="n"
                                  precision="n"
                                   nullable="Yes|No|Unknown">
2408 ~        <description>
                                  Inventory Part Number
              </description>
            </parameter>
          </command>
2410 ~    <row          containAllName="InventoryLines"
                        containerName="InventoryLine"
                        originalValueAttribute="originalValue"
                        counterAttribute="rowCounter"
                        DBRulesFileAttribute="DBRulesFile"
                        DBRuleNameAttribute="DBRuleOffset"
                        namespacePrefix="dbr"
                        namespaceURI=
                          "http://www.gaexpress.com/Selva/DBRules/writeOptimistic"
          />
  </DBRule>
</selva:DBRules>
```

FIG. 12

PROOF PRESENT

```
2500 <Behavior>
       Other actions here
2502   <action name="actionName"
2504           type="RASL"
2506           RPCRulesFile="pathToRPCRulesFile"
                 source="*String|sourceDocumentName"
                 contextXPath="XPathToContext"
                 contextSelectSingle="True|False"
                 target="targetDocumentName"
                 targetXPath="targetXPath">
               <sourceString> <![CDATA[...]]></sourceString>
               <parameter  parameterCounter=”m”
             parameterXPath="XPathToSource"
             parameterSelectSingle="True|False"
                                    constantValue="aConstantValue"
                                    repeatForAll="True|False" >
               other parameters here
     </action>
    other actions here
  </Behavior>
```

FIG. 13

```
                                                        2602
<selva:RPCRules xmlns:selva="http://www.ser.com/Selva/RPCRules">
  <RPCRule   SOAPNamespace="uri"
2604                        identityURLXPath="XPathToURLConnectionInfoInIdentity">
                            URLSource="documentName"
                            URLXPath="XPathToURLConnectionInfoInURLSource"
                  URLString="http://localhost/DuwamishSOAP/CInventory.asp"
                            contextXPath="XPathToContext"
                            contextSelectSingle="True|False"
                            targetXPath="XPathToTarget"
              role="admin"
                            method="basic"
                            userId="foo"
                            password="bar"
                            domain="myDomain" >

   2606          <command methodName="getInStock" >
                   <parameter name="name"
      2608                                      type="Integer"
                                                scale="n"
                                                precision="n"
                                                nullable="n">
                        2610          <description>
                                      Inventory Part Number
                </description>
                  </parameter>
                </command>
                <row              containAllName="InventoryLines"
   2612                           containerName="InventoryLine" />
  </RPCRule>
</selva:RPCRules>
```

FIG. 14